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A CASE REPORTING ODONTOMA

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ABSTRACT

Odontomas are the most common of the odontogenic tumors of the jaws which are benign slow growing and non-aggressive. Odontomas are usually asymptomatic but sometimes may interfere with the eruption of the associated tooth leading to impaction or delayed eruption. These lesions are usually diagnosed on routine radiological examination in the second decade of the life. A case report of 54 year old female is presented. It is tried to discuss the etiology, clinical presentation, histopathological features and treatment aspects of odontomas.

Keywords: Odontogenic tumors, odontoma, hamartomas, treatment

1. Introduction:

The odontoma is defined more as a hamartoma than a true neoplasm[1]. The term odontoma was given by Broca in 1866, who defined it as a tumor formed by overgrowth of complete dental tissue. Odontoma has been defined as a tumor that has developed and differentiated enough to produce enamel and dentin. Odontomas are composed of different dental tissues containing enamel, dentin, cementum, pulp etc[2, 3]. WHO classified it under category of tumors containing odontogenic epithelium with odontogenic ectomesenchyme, with or without dental hard tissue formation. There are three types of odontomas: odonto-ameloblastoma, complex and compound odontomas. They can also be peripheral, erupted and central odontoma according to the clinical presentations[4, 5].

2. Case Report:

A 54 year old female came with a chief complain of food lodgment and pain in right quadrant of lower jaw. On clinical examinations, pockets were noted around 48. Radiograph revealed inter-dental bone loss and loss of contour. A well defined homogenous radio-opaque mass was seen between the roots of 48 and 47. The mass had radiolucent halo. No displacement of teeth was noted. The mass was excised surgically under anesthesia and histological examination revealed it to be an odontoma.

3. Discussion:

According to the histopathological perspective, odontomas can be grouped as: (a) complex odontomas, in which the dental tissues are well formed but exhibit a more or less disorderly arrangement and (b) composite odontomas, in which the dental tissues are normal, but their size and conformation are altered giving rise to multiple small tooth-like structures called denticles[6]. The complex odontomas are usually located in the posterior mandible, while composite odontomas are more often found in the anterior maxilla. Complex odontoma are seen less common in comparison with compound variety in the ratio 1:2. The exact etiology of odontomas is uncertain, local trauma, infection growth pressure, hereditary and developmental influences have been suggested as possible causes. Majority of odontomas are asymptomatic, sometimes, swelling, pain, suppuration, bony expansion, delayed eruption and displacement of teeth are noted[7]. Severe cases of infection and regional lymphadenopathies have also been reported in many of the literature. The radiographic characteristics of odontomas are always diagnostic. The lesion consists of well defined radio-opacity surrounded by a radiolucent halo, which represents an enlarged cystic follicle. In compound odontoma multiple teeth like structures of varying size and shape are seen. Complex odontomas are seen as irregular radio-dense masses with no resemblance to dental structures[8]. Radiographically three different development stages can be identified depending on the degree of odontoma calcification. In the first stage the lesion appears radiolucent due to the lack of calcification, intermediate stage is characterized by partial calcification and in the final stage the odontoma appears radio-opaque which is surrounded by a radiolucent halo[9]. Sometimes, the degree of calcification of odontoma in the primary dentition is less. The

degree of calcification of odontoma in the primary dentition is less in comparison to permanent teeth and radiographic features are therefore not so radio-opaque. Therefore it is important to examine the radiographs carefully[10].

Conclusion:

The presented case was surgical cured with no post operative complications. Odontomas are benign tumors frequently seen in oral pathology that sometimes produce no symptoms and constitute casual findings of routine radiological studies. Early diagnosis and proper management of odontomas is necessary to prevent later craniofacial complications and other developmental problems.

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